



DIABETES EDUCATION INSULIN USE



PLEASE SCAN FOR
THE LOCATION

Aster
HOSPITAL
We'll Treat You Well

Mankhool, Kuwait Road, Al Mankhool - Dubai

📞 04 440 0500 🌐 asterhospitals.com 📱 @asterhospital

Aster
HOSPITAL
We'll Treat You Well

DEPARTMENTS

Accident & Emergency • Anesthesiology • Cardiology • Clinical Nutrition
Dental Centre • Dermatology • ENT • General Surgery • Insurance
Internal Medicine • Laboratory Services • Neurosurgery • Ophthalmology
Obstetrics & Gynaecology • Orthopedics • Patient Affairs

Aster
HOSPITAL
We'll Treat You Well



Digital Version



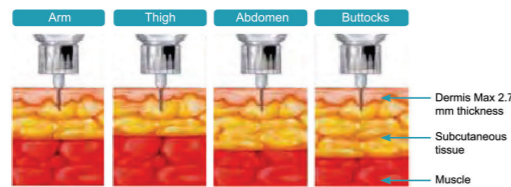
APPROPRIATE INJECTION TECHNIQUE IS CRUCIAL FOR THE SUCCESS OF INSULIN THERAPY.

INSULIN STORAGE

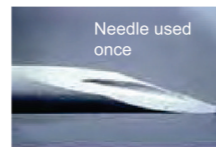
Insulin should be stored in a cool and dark place. Insulin pens and vials, which are not being used, should be refrigerated [door], but not frozen. The insulin vial should be taken out and kept at room temperature for at least 15-20 minutes before use. In rural areas or in places where a refrigerator is not available, it is advisable to put the vial in a plastic bag, tie a rubber band and keep it in a wide-mouthed bottle or earthen pitcher/FLASK filled with water. While travelling, insulin should be stored in a flask with ice, or in a handbag, or in a proper container if the outside temperature is >25°C.

Insulin should never be kept in the glove compartment of a car, or left in a locked car with closed windows.

INJECTION NEEDLE & REUSE: use the shortest available needle length of 4-6 mm, Ideally, do not reuse needles.



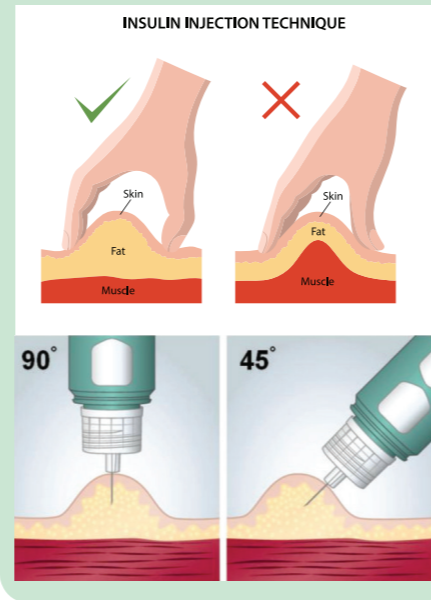
Changing injection site



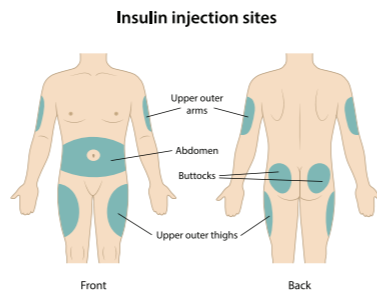
SITE CHOICE NOTES

Choose these areas:

- Any area of skin with a reasonable fat pad (able to “pinch an inch”). Delivery of insulin - Inject insulin at a 90° angle in desired injection site when using a shorter needle (4, 5 or 6 mm). A 45° angle may be needed if the person is thin or if a longer needle (8 mm) is being used. A proper skin lift should also be used in thin individuals or when using longer needles.



ROTATE SITES WITHIN RECOMMENDED BODY PARTS



- The abdomen is generally easiest to see and reach and is a good place for new injection users.
- Other common sites are the upper buttocks, outer thigh, hip flexor, back of the arm, lower back, and flanks.
- During the later stages of pregnancy, the flanks (just above the waistline on the sides of the body) may be ideal.

Avoid these areas:

- Sites that experience repeated muscle movement (such as the arms for tennis players or the thigh for runners), as this may yield inconsistent insulin absorption rates and potential for infusion set dislodgement
- A two-inch area surrounding the navel, skin folds and scars

ROTATION: Injection should be given at a clean site with clean hands. Rotate injection sites systematically.

Just as we rotate and change the tires on a car to prevent uneven tread wear, flats and dangerous blowouts, we must rotate injection sites to prevent skin problems and uneven insulin absorption. Infusing insulin into the same spots repeatedly can cause lipodystrophy a breakdown or inflammation of the fat tissue below the skin. When this happens, the skin can either dimple or become unusually hard and insensitive. These spots tend to have reduced blood flow, and insulin does not absorb properly if at all. It is well-worth taking the steps necessary to prevent the problem in the first place.

Heavy adult, a 4 x 4 pattern can be used:

Left Side					Right Side			
1	2	3	4	UMBILICUS (belly button)	1	2	3	4
5	6	7	8		5	6	7	8
9	10	11	12		9	10	11	12
13	14	15	16		13	14	15	16

Rotating sites in an organized fashion is the best way to prevent site overuse. Moving just a couple of inch each time. For example, when injecting on a large body part such as the abdomen of a heavy adult, a 4 x 4 pattern can be used:

DOSE: Both U-40 and U-100 insulin concentrations are available in India. While initiating insulin therapy, the patient should be informed that U-100 vials should be used with U-100 insulin syringes (orange cover and black scale markings), and U-40 vials with U-40 insulin syringes (red cover and red scale marking) only.



Appropriate mixing

NPH and premixed insulins. Roll 10 times – tip 10 times and visually check that insulin has a consistent milky appearance.

Priming shot

A priming shot is required when changing a cartridge or using a new needle. Typically, it is recommended to use 2 units to prime the pen,

In Dwell time

After injecting hold the syringe/pen device for 10 seconds to ensure full delivery of insulin dose.

INSULIN START CHECKLIST

Insulin Delivery

- Injection Sites, Rotation, Needle Length, Priming Shot, Appropriate Mixing, Needle Change, Insulin Dwell Time

Insulin

- Type, Action Time
- Frequency/timing,
- Storage/expiry, Dosing

Hypoglycemia

Signs and Symptoms, Causes, Treatment, Prevention

- Glucose Checks [Glucometer]
- Sharps Disposal
- Driving
- Snacks

